

L4 ANSWER 37 OF 204 MEDLINE DUPLICATE 7
 AN 2002047460 MEDLINE
 DN 21630865 PubMed ID: 11775127
 TI Association of beta2-adrenoceptor Gln27Glu variant with body weight but not hypertension.
 AU Lin R C Y; Ericsson J O; Benjafield A V; Morris B J
 CS Department of Physiology and Institute for Biomedical Research, The University of Sydney, New South Wales, Australia.
 SO AMERICAN JOURNAL OF HYPERTENSION, (2001 Dec) 14 (12) 1201-4.
 Journal code: 8803676. ISSN: 0895-7061.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200205
 ED Entered STN: 20020125
 Last Updated on STN: 20020531
 Entered Medline: 20020530
 AB Beta2-adrenoceptor (beta2-ADR)-mediated vasodilatation decreases vascular reactivity and blood pressure (BP) and chromosome 5 where its gene (ADRB2R) resides and shows linkage to hypertension (HT). A Gln27Glu ADRB2R variant confers resistance to agonist-induced desensitization and enhanced vasodilator response to isoprenaline. Therefore, we carried out a case-control study in a cohort of HT and normotensive (NT) Anglo-Celtic Australian white subjects whose parents had a similar BP status as the subjects. Glu27 frequency was 0.41 in 108 HT and 0.42 in 141 NT ($\chi^2 = 0.05$, $P = .82$). Within the HT group, the Glu27 **allele** was more prevalent in 61 subjects who were overweight (body mass index [BMI] ≥ 25 kg/m²) compared with 41 who were lean (BMI < 25 kg/m²); ie, 0.49 v 0.31, respectively ($\chi^2 = 6.4$, $P = .012$). Furthermore, Glu27 tracked with elevation in BMI in these subjects: 24 \pm 4 kg/m², 27 \pm 5 kg/m², and 28 \pm 5 kg/m² for Gln/Gln, Gln/Glu, and Glu/Glu, respectively ($P = .0058$ by one-way ANOVA). Thus, the Gln27Glu beta2-ADR variant is excluded in HT, but might influence body weight.